

FLUX DEVELOPER

Fortify's FLUX Developer platform gives users the ability push the limits of material properties for additive manufacturing applications through software and consulting services. Developer is built for Fortify's FLUX Series 3D printers, the only photopolymer DLP system that can print and process fiber-filled and highly viscous resins.

Too often, high performance material formulations are shelved due to the limited processing windows of traditional DLP platforms. The Flux Developer platform accelerates the development of new, high value materials.

Flux Developer is the same tool that is used daily inFortify's labs.





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The Software

Expand Your Processing Window

Fortify's Flux Developer Software opens access by providing full control of processing parameters and powerful DOE tools. Users can quickly experiment with a range of curing variables (intensity and dose) as well as material flow, temperature, and build plate dynamics.

Add Material Configuration												
🧭 Basics ——	— 🛕 скм —	3 Peel	Plunge	S Review								
CKM Settings												
CKM Mode		Tempera ▼ 123										
Maximum Aux Lo	oop Wall Temp											
				CONTINUE								

WORKING CURVE SL	OT TEST RE	FERENCE							
						Intensity [mW]	Desage [mJ]	Intensity [mW]	Dosage [mJ]
		<u> </u>					80	10.7	80
1	==	±*		2 *			88	10.7	88
							96	10.7	96
							104	10.7	104
2°. 28'	=*	-10	=1.1	212				10.7	
							120		120
-12 -14		-14					80		
213	-1.5	_16	=17	-18			88		
							96		
_19 _20	21	-22	_23	-24	10		104		104
-	=	-	-	-					
							120		120

Create New Material Profiles

Compass Developer comes with a new Materials Portal which gives users access to the materials and profiles created throughout your organization. From here, you can share new materials formulations and send them down to your Fortify Flux printer for printing.

Working Curve Test

Fortify is developing several tools to assist in the on-boarding of new materials to allow users of Flux Developer to easily understand and test the proper starting parameters. The working curve test automatically creates a print that scans through several intensity and dose combinations. The result of this test will allow users to determine the optimal exposure settings to print at their desired layer heights.

Consulting Services Supporting Flux Developer

Partnering with Fortify is the best path to develop new materials for targeted additive manufacturing applications. To fully leverage Fortify's hardware innovations, Fortify offers our domain expertise in photopolymer curing kinetics, resin rheology, and process engineering in service packages tailored to your needs.

Fortify Consulting Services are customized to provide each user with the support needed to achieve their goals.

Fortify Consulting Services can encompass the following:

- Monthly coaching check-ins with Fortify material specialists.
- Technical feasibility studies
- Resin and Additive Selection
- Process and material economics assessments
- Proof of concept and prototype demonstration.
- Manufacturing scaleup strategies.
- Collaborative go to market strategies

Work can be carried out at Fortify, at partner locations, or both.



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